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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,090

06/22/2006

Toshiyuki Matsumura

2006\_0942A

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06/04/2009

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EXAMINER

ROBINSON, RYAN C

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

06/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,090	<b>Applicant(s)</b> MATSUMURA ET AL.	
	<b>Examiner</b> RYAN C. ROBINSON	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/22/2006; 4/28/2009</u> .                                    | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This communication is responsive to the applicant's response/amendment filed on 4/28/2009.

2. Claims 10-19 have been amended, but were non-elected claims from the restriction dated 5/23/2008, and therefore will not be considered for examination on the merits.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-5, 7, 9, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dodd, US Publication 2006/0153410, filed on 10/2/2003 (hereby Dodd), in view of Zirlis, U.S. Patent No. 3,780,867, published on 12/25/1973, (hereby Zirlis).**

5. As to claim 1, Dodd teaches a speaker device (Fig. 1), comprising a cabinet (10), a speaker unit attached to the cabinet (11), and a container (22), with an adsorbent material (20) disposed in an interior of the first container, and an air hole for allowing air to pass between the interior of the first container (22)

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and an interior of the cabinet (10) is formed through the first container. Dodd discloses that the container is a tube, (Para. 0033, line 3) suggesting an opening on either end.

It is noted that Dodd does not explicitly disclose that the container is removably attached to an opening formed in the cabinet. However having a removable container of adsorbent material is well known in the art and Zirlis teaches a container (23) removably attached to a first opening (13) formed in the cabinet. It would have been obvious to one of ordinary skill at the time of applicant's invention to allow the first container taught by Dodd to be removable, because it is well known in the art that adsorbent properties of materials, in the case of Zirlis, activated charcoal (Col. 2, line 64), is not permanent, and requires recharging, and/or replacement. The removable cartridge taught by Zirlis would have provided for a simple design, and ease of use. (Col. 1, lines 34-37).

6. As to claim 2, Dodd and Zirlis remain as applied above. Dodd does not explicitly teach that the adsorbent material is activated carbon, however, examiner takes official notice that activated carbon is well known in the art for its adsorbent properties, and would have been a suitable design choice as an adsorbent to one of ordinary skill in the art.

7. As to claim 3, Dodd and Zirlis remain as applied above, Dodd further teaches that the container comprises a first container (23), and said opening in said cabinet comprises a first opening. second container (14), having a

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deterioration prevention material (16) for adsorbing a substance having a deteriorating effect on said adsorbent material, said deterioration prevention material being located in the interior of the second container (14). Dodd teaches that the second container could be placed inside the cabinet (10) (Para. 0030, lines 7-9). An air hole for passing air between the interior of the second container (14) and the interior of the cabinet is formed through the second container. The second container is disclosed as a tube having a bore (Para. 0030, line 10), corresponding to and air hole.

It is noted that Dodd does not teach that the second container is removably attached to a second opening formed in the casing. However, Zirlis teaches a first container removably attached to second opening formed in the cabinet. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to allow the second container taught by Dodd to be removable, because like the adsorbent material used the first container, the deterioration prevention property of, in the case of Dodd, a desiccant, is well understood in the art as being not permanent, and requiring recharging or replacement.

8. As to claim 4, Dodd and Zirlis remain as applied above. Dodd does not explicitly teach that the deterioration prevention material is silica gel, however, examiner takes official notice that silica gel is well known in the art as a desiccant, and therefore would have been a suitable choice as a deterioration prevention material to one of ordinary skill in the art.

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9. As to claim 5, Dodd and Zirlis remain as applied above. Dodd further teaches a port (12) for allowing air to pass between the interior and exterior of the cabinet (10), wherein the deterioration prevention material (16) provided in the second container (14) is disposed at a position such that the deterioration prevention material is closer to an opening which is in the interior of the cabinet and formed by the port, than the first container (22). Dodd teaches that the container for the deterioration prevention material (14) can be located anywhere inside the enclosure (Para. 0030), and since the deterioration prevention material is for removing moisture coming from port (12), locating the second container (14) near the inlet would have been an obvious design choice to one of ordinary skill.

10. As to claim 7, Dodd and Zirlis remain as applied above. Dodd is silent as to the heat resistant properties of the second container, however one of ordinary skill would have taken into consideration heat resistant limits of any devices used in speakers. Furthermore, the second container must have sufficient heat resistance in order to operate near the heat source disclosed by Dodd (Para. 0032, lines 1-2).

11. As to claim 9, Dodd and Zirlis remain as applied above. Dodd further teaches a tubular port (12), disposed for passing air between the interior and the exterior of the cabinet (10), a deterioration prevention material (16), and as supporting member (14), for supporting the deterioration prevention material. It is

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noted, however, that Dodd is silent as to whether or not the supporting member (14) is removably attached to an interior of said port. However one of ordinary skill in the art would have allowed for a removable container, since it is well known in the art that the deterioration prevention property of, in the case of Dodd, a desiccant, is well understood in the art as being not permanent, and requiring recharging or replacement.

12. As to claim 20, Dodd and Zirlis remain as applied above. Zirlis further teaches that the container (23) comprises a cartridge shaped and arranged to be removably inserted into said opening (13) in the cabinet so as to form a closure for said opening while simultaneously exposing said absorbent material to an atmosphere within the cabinet (21) when said cartridge is located in said opening.

**13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dodd, US Publication 2006/0153410, filed on 10/2/2003 (hereby Dodd), in view of Zirlis, U.S. Patent No. 3,780,867, published on 12/25/1973, (hereby Zirlis), further in view of Loop et al., US Patent No. 6,716,276, filed on 6/25/2002 (hereby Loop).**

14. As to claim 6, Dodd and Zirlis remain as applied above. Dodd does not explicitly disclose that the deterioration prevention material includes cobalt chloride, and that the second container is formed such that the deterioration

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prevention material is capable of being seen from an exterior of the cabinet, however the use of cobalt chloride as an indicator for a deterioration prevention material is well known in the art. Loop teaches a deterioration prevention material (15), that uses cobalt chloride as an indicator (Col. 1, lines 6-8). It would have been obvious to one of ordinary skill in the art to include cobalt chloride in a deterioration prevention material, in order to add the extra feature of indicating when the deterioration prevention properties are exhausted. (Loop: Col. 1, lines 27-30). Furthermore it would have been obvious to one of ordinary skill to allow the deterioration prevention material to be seen from an exterior of the cabinet, in order for a user to know when to replace the material.

**15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dodd, US Publication 2006/0153410, filed on 10/2/2003 (hereby Dodd), in view of Zirlis, U.S. Patent No. 3,780,867, published on 12/25/1973, (hereby Zirlis), further in view of Maekawa et al., US Patent No. 6,632,771, published on 10/14/2003 (hereby Maekawa).**

16. As to claim 8, Dodd and Zirlis remain as applied above. Dodd does not explicitly disclose that the deterioration prevention material includes a photocatalyst. However including a photocatalyst in a deterioration prevention material, in order to restore the properties of deterioration prevention is well known in the art and Maekawa teaches a deterioration prevention material, with a photocatalyst (Col. 2, lines 5-6). It would have been obvious to one of ordinary



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skill in the art to enhance the performance of the deterioration prevention material (Col. 1, lines 14-15).

### ***Response to Arguments***

17. Applicant's arguments filed on 4/28/2009 have been fully considered but they are not persuasive. Applicant asserts that the Zirlis reference does not provide the necessary teaching for one of ordinary skill in the art to modify the Dodd reference to obtain the invention with the container removably attached to an opening of the cabinet. Examiner respectfully disagrees. One of ordinary skill in the art, at the time of applicant's invention, in dealing with an adsorbent material, would have been capable of modifying the Dodd reference. Since it is well known that adsorbent materials deteriorate, as taught in both the Dodd and Zirlis references, the technique of using a removable cartridge to replace the material would have been obvious, as well as providing a proper opening.

### ***Conclusion***

The prior art made of record

- |    |                       |                     |
|----|-----------------------|---------------------|
| a. | US Publication Number | <b>2006/0153410</b> |
| b. | US Patent Number      | <b>3,780,867</b>    |
| c. | US Patent Number      | <b>6,716,276</b>    |
| d. | US Patent Number      | <b>6,632,771</b>    |

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18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

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/R. C. R./

Examiner, Art Unit 2614

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614